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ABSTRACT

A longitudinal records analysis of students enrolled in Chapter 1 and other categorical programs of the Mesa Public Schools in the 1980-81 school year was conducted. Data were collected from 1980 to 1984 regarding service patterns in Chapter 1, Indian Education, Migrant, and English as a Second Language (ESL) programs. It was found that Chapter 1 students received services on an average of 1.4 years, ESL 1.4 years, Indian Education 1.7 years, and Migrant Education 2 years. Generally, Chapter 1 students' participation was below 2% in Indian Education, 4% in the Migrant program and 10% in ESL. An average 30% of Chapter 1 students were served by reading and 25% by math services in grades 2-6. From 1980 to 1984, 1st grade and kindergarten participation rose from 20 to 38%. Within Chapter 1, 40% of students received multiple services, mostly math and reading. Exit of students from ESL to Chapter 1 was the predominant form of transfer between programs (25%). Few Chapter 1 students transferred to categorical programs. Longitudinal analysis of a first grade cohort with 3 and 4 years of service showed that the average reading and math NCE scores declined with increased length of service. Gains made were not sustained. Chapter 1 showed the lowest retention rate (2.5%) with ESL the highest (9%). (JMM)

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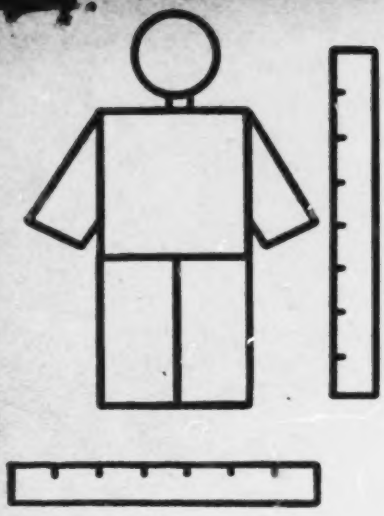

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Analysis of School District Records to Describe the Long-Term Effects of Chapter 1 Services on the Participants in the Mesa Public Schools and an Assessment of the Confounding Effects of Participation in Other Categorical Programs

Final Report
December 16, 1986

Prepared for the U.S. Department of Education
Pursuant to RFP No. NIE-R-850015
Contract No. 400-86-0029

Prepared by
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FOREWORD

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Twenty years have passed since the Federal Government inaugurated its compensatory education program. In the intervening years, the program has been continually modified to reflect the experiences of practitioners and findings from research. In November 1984, a plan for a national assessment of the Chapter 1 program was designed to contribute to that process by providing contemporary information for the 1987 reauthorization hearings mandated by Congress. The Chapter 1 records analysis described herein is part of the national assessment study. The result of this study will be presented to Congress in an evaluation report which will address current operation and effectiveness of Chapter 1 programs. The records analysis was funded by the U.S Department of Education, pursuant to RFP No. NIE-R-850015, Contract No. 400-86-0029.

The major effect in the development of this report was the responsibility of the Department of Research and Evaluation under the direction of Dr. James DeGracie. Mrs. Judy Hill and Mrs. Donna Simon accomplished the extensive typing and editing for this report. Research and Evaluation is a department answering to the Associate Superintendent of the Mesa Public Schools, Mr. David Eagleburger.

EXECUTIVE SUMMARY

Purpose

The purpose of conducting a longitudinal Chapter 1 records analysis in the Mesa Public Schools was to describe long-term patterns and effects of Chapter 1 services on the participants in the schools' programs, and to assess the confounding effects of participation of Chapter 1 students in other categorical programs.

Summary of Results

This report describes a longitudinal records analysis of students who were enrolled in Chapter 1 and other categorical programs of the Mesa Public Schools in the 1980-81 school year. Prerequisite to this analysis was the creation of a computerized data base integrating the manual and computerized records maintained by the school district. Information was obtained for a four-year period (1980-81 to 1983-84) in regard to service patterns in Chapter 1 programs, the Indian Education program, the Migrant program, and the English as a Second Language program (ESL). In addition, information was compiled regarding the reading and math achievement of participants in the four programs.

During the program years of 1980 through 1984, the Chapter 1 program in the Mesa Public Schools has undergone many changes. The most significant changes include program format and funding. Service expansion has continued to grow with increasing emphasis placed in the kindergarten through third grades. An early intervention-prevention approach dictates the thrust of the Chapter 1 programs along with substantial increases in federal funding to provide additional instructional personnel and funds for materials.

Chapter 1 students in Mesa Public Schools received services for 1.4 years on average. ESL students received services for 1.4 years on average, Indian Education students were served for an average of 1.7 years, and participants in the Migrant program had services for two years on average.

Few students in the Mesa Public Schools received multiple service in Chapter 1 and other categorical programs. Average participation of Chapter 1 students was lowest in Indian Education (below 2 percent), reached 4 percent in the Migrant program, and was highest in the ESL program (10 percent). Multiple program participation within a school year tended to be sequential rather than simultaneous, that is, Chapter 1 students were likely to exit to another program, but rarely received two services at the same time.

The majority of Chapter 1 students were served by reading programs in grades 2 to 6 (an average 30 percent). Just under one quarter received math services in these grades. From 1980 through 1984, participation in existing and newly created first grade services and kindergarten programs nearly doubled (from 20 to 38 percent).

On the average, four out of ten students received multiple services within Chapter 1. Participation in dual and simultaneous services in reading and math was the most frequent form of multiple program membership.

Exit of students from ESL to Chapter 1 was the predominant form of transfer from categorical programs. One out of four ESL students exited into Chapter 1. This rate reflects the districts' philosophy to shift the focus of service delivery to academically orientated programs as soon as satisfactory language proficiency in English has been established.

Few Chapter 1 participants exiting the program were placed in categorical programs. The highest share of ex-Chapter 1 students (3.5 percent on the average) was placed in ESL, while the lowest percentage was in Indian Education (1.5 percent). Predominant pattern was the transfer from Chapter 1 kindergarten and first grade.

Longitudinal analysis of a first grade cohort from 1980-81 to 1983-84 with three and four years of Chapter 1 service revealed a decline of the average NCE scores in reading and math with increased length of service. Gains made were not sustained, regardless of length of service. In all grades and over time, math average scores (39th to 47th NCE or 30th to 43rd percentile) tended to be higher than reading scores (35th to 45th NCE or 23rd to 40th percentile).

Over the four-year period of time, Chapter 1 showed consistently the lowest retention rate (2.5 percent on the average). Retention rates for the other programs ranged from 4 percent (Migrant program) to 9 percent (ESL). In all programs

and over time, the emphasis was on retaining students in earlier grades. This focus reflects the district policy of early intervention and remediation in the delivery of services to low-achieving students.

The grade level of most participants in Chapter 1 was consistent with district and state philosophy about the primary focus of these services. During the four years under study, a growing emphasis on early remediation was evident in service delivery at increasingly earlier grade levels.

Chapter 1 participation tended to be slightly more male dominated (56 percent on the average). The same pattern was found for the ESL program and, to a lesser degree, for the Migrant program and the Indian Education program. In all programs, gender was more equally distributed in the early grades, while junior high grades were clearly more male dominated.

In regard to ethnic minority representation, the characteristics of Chapter 1 participants were different from the predominantly white district population. Students with Spanish surnames constituted a slightly higher share (an average of 17 percent versus 13 percent on the district level). The ethnic composition of the other categorical programs reflected the emphasis on services to a largely Hispanic population (Migrant and ESL programs) or Native American population (Indian Education).

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INTRODUCTION

This report describes a longitudinal records analysis of students who were enrolled in Chapter 1 and other categorical programs of the Mesa Public Schools in the 1980-81 school year. Prerequisite to this analysis was the creation of a computerized data base integrating the manual and computerized records maintained by the school district. Information was obtained for a four-year period (1980-81 to 1983-84) in regard to service patterns in Chapter 1 programs, the Indian Education program, the Migrant program, and the English as a Second Language program (ESL). In addition, information was compiled regarding the reading and math achievement level of participants of the four programs.

The findings of the records analysis are reported in response to ten research questions which fall into two categories. The seven questions in the first research category investigate the patterns of service for participants in Chapter 1 programs and the three other categorical programs. The three questions in research category 2 deal with the longitudinal development of achievement and retention patterns of program participants during the four years under study.

The report is organized into five parts. Part I provides a summary of the major findings. Part II contains the detailed findings of the records analysis guided by the ten research questions. Part III presents demographic information about the Mesa Public School District. Part IV provides descriptions and demographic information for Chapter 1 and the other categorical programs during the four years of the analysis. Part V contains a description of the integrated data base that was used in the study.

Figures 1 and 2 present the research questions in the revised form made necessary after the planning meeting on June 11-12, 1986, in Washington, DC.

Figure 1
Research Questions in Category 1*
Determination of Patterns of Service to
Children in the Mesa Public Schools

Research Question 1 - What is the average number of years that a student receives Chapter 1 services?

Research Question 2 - What is the average number of years the students receive services from selected categorical programs?

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*Revised after planning meeting of Chapter 1 project groups, June 11-12, 1986 at Washington, DC.

Research Question 3 - What proportion of the Chapter 1 students receive services under other categorical programs?

Research Question 4 - What is the proportion of Chapter 1 students served in particular Chapter 1 programs?

Research Question 5 - What is the proportion of students receiving multiple services in Chapter 1 by program?

Research Question 6 - What is the frequency with which students who exit other categorical programs are placed in Chapter 1?

Research Question 7 - What is the frequency with which students who exit Chapter 1 are placed in other categorical programs?

Figure 2
Research Questions in Category 1*
Long-term Accomplishments of Children
Served by Chapter 1 in the Mesa Public Schools

Research Question 8 - What is the achievement level of Chapter 1 program participants in reading and mathematics as measured by the California Achievement Test NCE scores?

Research Question 9 - Do the program gains in reading and mathematics as measured by the California Achievement Test NCE scores remain after the students have left the program?

Research Question 10 - Is the retention rate for Chapter 1 participants significantly different from the retention rate of non-Chapter 1 participants with similar achievement levels?

PART I

Summary of Findings

(1) General Development of Chapter 1 from 1980 to 1984

During the program years of 1980 through 1984, the Chapter 1 program in the Mesa Public Schools has undergone many changes. The most significant changes include program format and funding. Service expansion has continued to grow with increasing emphasis placed in the kindergarten through third grades. An early intervention-prevention approach dictates the thrust of the Chapter 1 programs along with substantial increases in federal funding to provide additional instructional personnel and funds for materials.

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*Revised after planning meeting of Chapter 1 project groups, June 11-12, 1986 at Washington, DC.

(2) Average Number of Years Served in Chapter 1

Chapter 1 students in Mesa Public Schools received services for 1.4 years on average. Seventy-one percent of Chapter 1 participants had one year of service, and 20 percent received two years of service. Only 2 percent of Chapter 1 participants were serviced during the entire four-year period under study.

(3) Average Number of Years Served in Categorical Programs

ESL students received services for 1.4 years on average, Indian Education students were served for an average of 1.7 years, and participants in the Migrant program had services for two years on average. Widest differences among program patterns were found for the three-year service duration: ESL - 8 percent, Indian Education - 14 percent, Migrant students - 35 percent.

(4) Multiple Categorical Program Services to Chapter 1 Students

Few students in the Mesa Public Schools received multiple service in Chapter 1 and other categorical programs. Average participation of Chapter 1 students was lowest in Indian Education (below 2 percent), reached 4 percent in the Migrant program, and was highest in the ESL program (10 percent). Multiple program participation within a school year tended to be sequential rather than simultaneous, that is, Chapter 1 students were likely to exit to another program, but rarely received two services at the same time.

(5) Participation Patterns in Chapter 1

The majority of Chapter 1 students were served by reading programs in grades 2 to 6 (an average 30 percent). Just under one quarter received math services in these grades. During the four years under study, the focus clearly shifted to earlier intervention. Participation in existing and newly created first grade services and kindergarten programs nearly doubled (from 20 to 38 percent).

(6) Multiple Service Within Chapter 1 Programs

On the average, four out of ten students in received multiple services within Chapter 1. Participation in dual and simultaneous services in reading and math was the most frequent form of multiple program membership. During the four years, the share of advanced elementary students dropped from one-half to one-third, while the share of first graders rose to 27 percent of the multiple service recipients within Chapter 1.

(7) Transfer From Categorical Programs to Chapter 1

Exit of students from ESL to Chapter 1 was the predominant form of transfer from categorical programs with one out of four ESL

students exiting into Chapter 1. This rate reflects the philosophy to shift the focus of service delivery to academically orientated programs as soon as satisfactory language proficiency in English has been established.

(8) Transfer from Chapter 1 to Categorical Programs

Few Chapter 1 participants exiting the program were placed in categorical programs. The highest share of ex-Chapter 1 students (3.5 percent on the average) was placed in ESL, while the lowest percentage was in Indian Education (1.5 percent). Predominant pattern was the transfer from Chapter 1 kindergarten and first grade.

(9) Achievement Patterns of Chapter 1 Students

Longitudinal analysis of a first grade cohort from 1980-81 to 1983-84 with three and four years of Chapter 1 service revealed a decline of the average NCE scores in reading and math with increased length of service. Gains made were not sustained, regardless of length of service. In all grades and over time, math average scores (39th to 47th NCE or 30th to 43th percentile) tended to be higher than reading scores (35th to 45th NCE or 23rd to 40th percentile).

(10) Retention in Chapter 1 and the Other Categorical Programs

Over the four-year period of time, Chapter 1 showed consistently the lowest retention rate (2.5 percent on the average). Retention rates for the other programs ranged from 4 percent (Migrant program) to 9 percent (ESL). In all programs and over time, the emphasis was on retaining students in earlier grades. This focus reflects the district policy of early intervention and remediation in the delivery of services to low-achieving students.

(11) Participants' Characteristics - Grade Level Representation

The grade level of most participants in Chapter 1 was consistent with district and state philosophy about the primary focus of these services. During the four years under study, a growing emphasis on early remediation was evident in service delivery at increasingly earlier grade levels. In the Indian Education program, the focus on the lowest-achieving students regardless of grade has resulted in a distribution of services that is spread out more equally across grade levels up to junior high.

(12) Participants' Characteristics - Gender Representation

Chapter 1 participation tended to be slightly more male dominated (56 percent on the average). The same pattern was found for the ESL program and to a lesser degree for the Migrant program and the Indian Education progam. In all

programs, gender was more equally distributed in the early grades, while junior high grades were clearly more male dominated.

(13) Participants' Characteristics - Ethnic Representation

In regard to ethnic minority representation, the characteristics of Chapter 1 participants were different from the predominantly white district population. Students with Spanish surnames constituted a disproportionately higher share (an average of 17 percent versus 13 percent on the district level). The ethnic composition of the other categorical programs reflected the emphasis on services to a largely Hispanic population (Migrant and ESL programs) or Native American population (Indian Education).

PART II

Research Category 1

Research Question 1 - What is the average number of years a student receives Chapter 1 services?

For those students on the data base who were served by Chapter 1 for at least one year, the average was 1.4 years, with a standard deviation of .71.

Table 1.1 shows the number of students served by Chapter 1 for each possible service pattern from one to four years of services received.

Students with one year of service represent 71.3 percent of all students with Chapter 1 service on the data base. Just under 20 percent of the Chapter 1 students from 1980-81 through 1983-84 had received two years of service. Less than 7 percent had services for three years, while only 2 percent received services during the entire four-year period under study.

Research Question 2 - What is the average number of years a student receives services from other categorical programs?

Table 2.1 displays the average number of years in service for those students on the data base who were served by a categorical program for at least one year.

ESL students received services for an average of 1.4 years (SD: .45), the shortest period of time of all categorical programs, and very similar to the average duration of services for Chapter 1 students. Indian Education students received services for an average of 1.7 years (SD: .91), while Migrant students were served for an average of just under two years (SD: .86), the greatest duration of services among the four programs.

Table 1.1
Pattern of Chapter 1 Program Service
by Years in Program*

Years in Program	1980-81	1981-82	1982-83	1983-84	Number of Students	Percent of Students
1	X				1,732	26.4
		X			1,497	22.8
			X		1,352	20.6
				X	1,977	30.1
					6,558	71.3
2	X	X			450	24.9
	X		X		138	7.6
	X			X	90	5.0
		X	X		407	22.5
		X		X	145	8.0
			X	X	579	32.0
					1,809	19.7
3	X	X	X		190	30.5
	X	X		X	71	11.4
	X		X	X	73	11.7
		X	X	X	289	46.4
					623	6.8
4	X	X	X	X	204	2.2
					9,194	100.0

*Students with at least one Chapter 1 service.

These averages appear to correspond to the different philosophies and purposes of the categorical programs.

Table 2.2 displays for each program the share of students in the possible time pattern of service. The majority of participants had service for one year only: 41 percent of the Migrant students, 54 percent of the Indian students and 70.5 percent of the ESL students.

One out of four participants in the Indian Education program and the Migrant program received two years of services as compared to one out of five ESL students. The widest differences among programs were found for the three-year service period. Eight percent of the ESL students and 14.5 percent of the Indian Education students received three years of service. However, just under 35 percent of the

Migrant students were found in that category. Finally, 5.5 percent of the participants in Indian Education and 3.0 percent of the ESL students received services over the entire four years under study.

Table 2.1
Average Number of Years in Service, by Program

	Mean	Standard Deviation
Indian Education	1.7	.9
Migrant Education	1.9	.9
ESL	1.4	.4

Table 2.2
Percent of Students in 1, 2, 3, and 4 Years of Service, by Program

	Years of Service			
	1	2	3	4
Indian Education	53.6	26.4	14.5	5.5
Migrant Education	41.0	24.1	34.8	0
ESL	70.5	18.5	7.9	3.0

Research Question 3 - What proportion of the Chapter 1 students receive services under other categorical programs?

Table 3.1 reports by year the total number of Chapter 1 students (duplicate count) and the number and percent of those students served in Chapter 1 and other categorical programs.

During the four years of this study, the number of Chapter 1 students rose from 2,608 to 3,098. In the same time, the share of Chapter 1 students served in other programs decreased from 16.3 percent to 13.2 percent.

Participation of Chapter 1 students was lowest in the Indian Education program. It remained steady at about 2 percent of Chapter 1 students from 1980-81 to 1982-83, and decreased to 1.4 percent in 1983-84.

Participation of Chapter 1 served students in the Migrant program was about 4 percent in 1981-82 and 1983-84 and

Table 3.1
Chapter 1 Recipients of Multiple Programs
by Year and Program
(Duplicate Count)

Program / Year	Chapter 1 Total	Chapter 1 in Indian Education	Chapter 1 in Migrant Program	Chapter 1 in ESL Program	Chapter 1 Total in Other Programs
1980-81					
N	2,608	52	N/A*	373	425
%	100%	2%	N/A	14.3%	16.3%
1981-82					
N	2,952	52	115	304	471
%	100%	1.8%	3.9%	10.3%	15.9%
1982-83					
N	2,935	65	144	250	459
%	100%	2.2%	4.9%	8.5%	15.6%
1983-84					
N	3,098	44	133	233	410
%	100%	1.4%	4.3%	7.5%	13.2%

*N/A - Not Available

peaked at 5 percent in 1981-83. No records were available in 1980-81.

Participation of Chapter 1 served students was highest in the ESL program. The year 1980-81 was found to have the greatest share with 14.3 percent. In the three subsequent years, there was a decline in participation to 7.5 percent of the Chapter 1 students. Part of this decline is certainly due to the establishment of separate records for the Migrant program from 1981-82 on. For the subsequent years, the decrease in the share is probably due to the fact that less Chapter 1 served students had limited or no proficiency in English so that ESL placement was not required.

Although the data point to some overlap between Chapter 1 and other categorical programs, the true rate of multiple service is not reflected in these numbers. The majority of children were not served by two programs but rather by one of the two. Which program was chosen to serve the child depends on the continuous assessment of the student's needs after he or she has been attending school for a number of weeks. A typical example of the process underlying the documented overlap between Chapter 1 and ESL would be a monolingual child. First, the focus is on establishing

survival skills in English, which suggests placement in the ESL program. Once the language function is established, the child will be placed in Chapter 1 for academic assistance in reading and/or math programs. The assignment of two program codes does not reflect this transition from ESL to Chapter 1 within one school year.

Research Question 4 - What is the proportion of students served by particular programs in Chapter 1?

Figures 4.1 through 4.4 depict for each year under study the percentage of students served by particular programs in Chapter 1. The percentages are based on the total number of students with one or more Chapter 1 services in each year.

Two tendencies should be highlighted here:

1. From 1980-81 through 1983-84, the number of programs in Chapter 1 rose from 9 to 12 programs. The increase is due to a stronger emphasis on preschool and first grade intervention. This is evident in the creation of additional programs for this level covering both school year and summer school services. The VIP kindergarten program, the first grade pullout program, and the summer school pre-K program were added to traditional Chapter 1 services in 1981.

2. Across all four years, the majority of Chapter 1 students were served by reading programs. However, one can observe clear changes in regard to the grade levels being served. The focus appears to shift to earlier intervention. The percentage of students in the reading program for grades two through six declined linearly from just over one-third in 1980-81 to one-quarter in 1983-84. The percentages of students in the math program for these grades slightly increased, from 21.5 percent in 1980-81 to 23.5 percent in 1983-84.

   The share of students in the reading program for grades seven through nine dropped sharply from 16.2 percent in 1980-81 to 6.1 percent in 1981-82. The percentage rose moderately to 7.8 percent in 1983-84. In the math program for grades seven through nine, the share of Chapter 1 students declines linearly from 7 percent in 1980-81 to 3.6 percent in 1983-84.

Complementary to the decline found in upper elementary grades and junior high level, there is a consistent trend to direct more services to students in the early primary grades. This tendency is evident in the clearly increased involvement of students in the first grade reading and

pullout programs (rising from 18.1 percent to 24 percent of all participants).

The most dramatic change was found in preschool programs. In 1980-81, there was only one preschool program, the extended day kindergarten. It showed the lowest percentage of participants (1.4 percent) in Chapter 1 programs offered during the school year. In 1981-82, the VIP kindergarten program was added to preschool services. The share of these two programs rose from 11 percent in 1981-82 to 14.2 percent of the Chapter 1 participants in 1983-84.

Proportion of Programs in Chapter 1, 1980-81

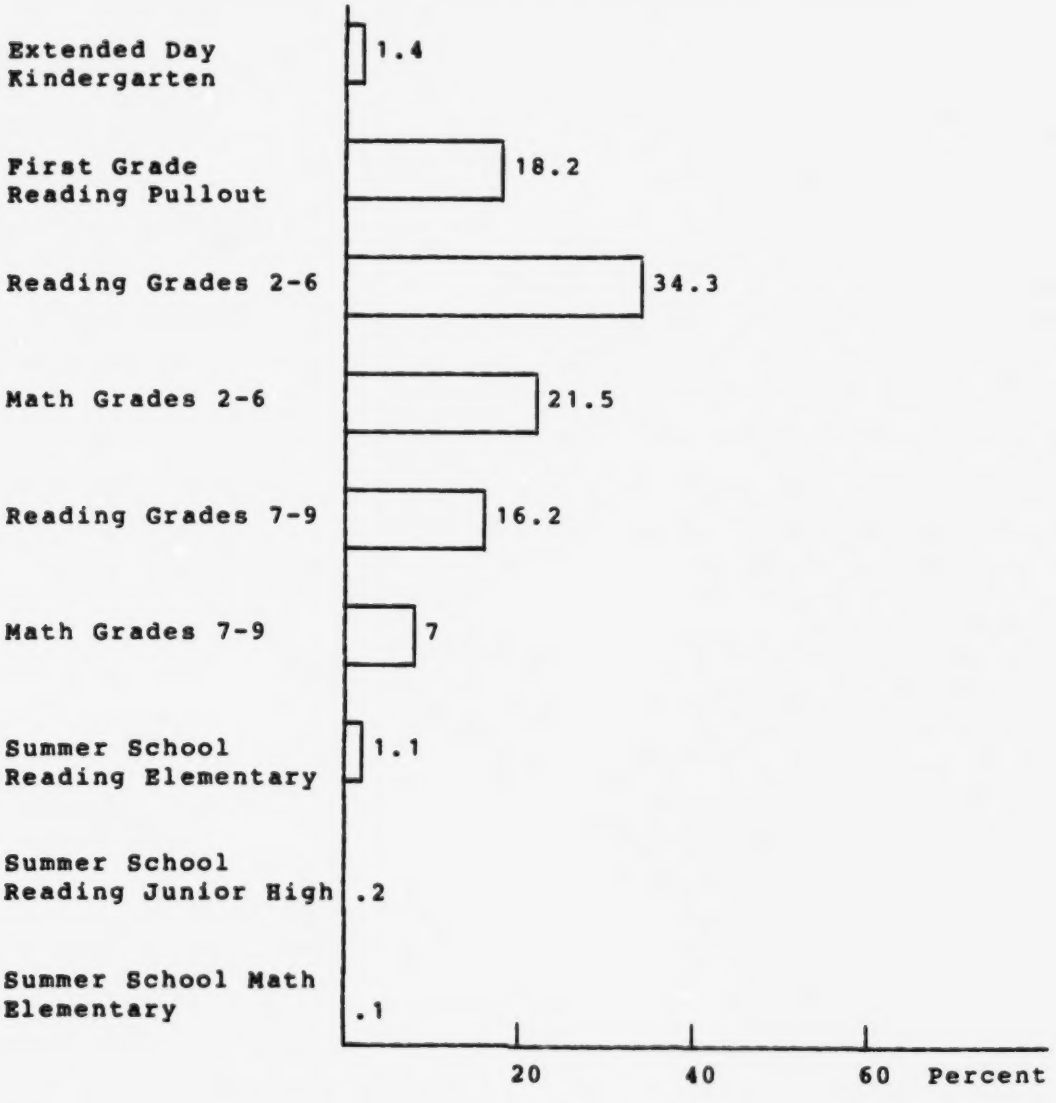

Figure 4.1

Proportion of Programs in Chapter 1, 1981-82

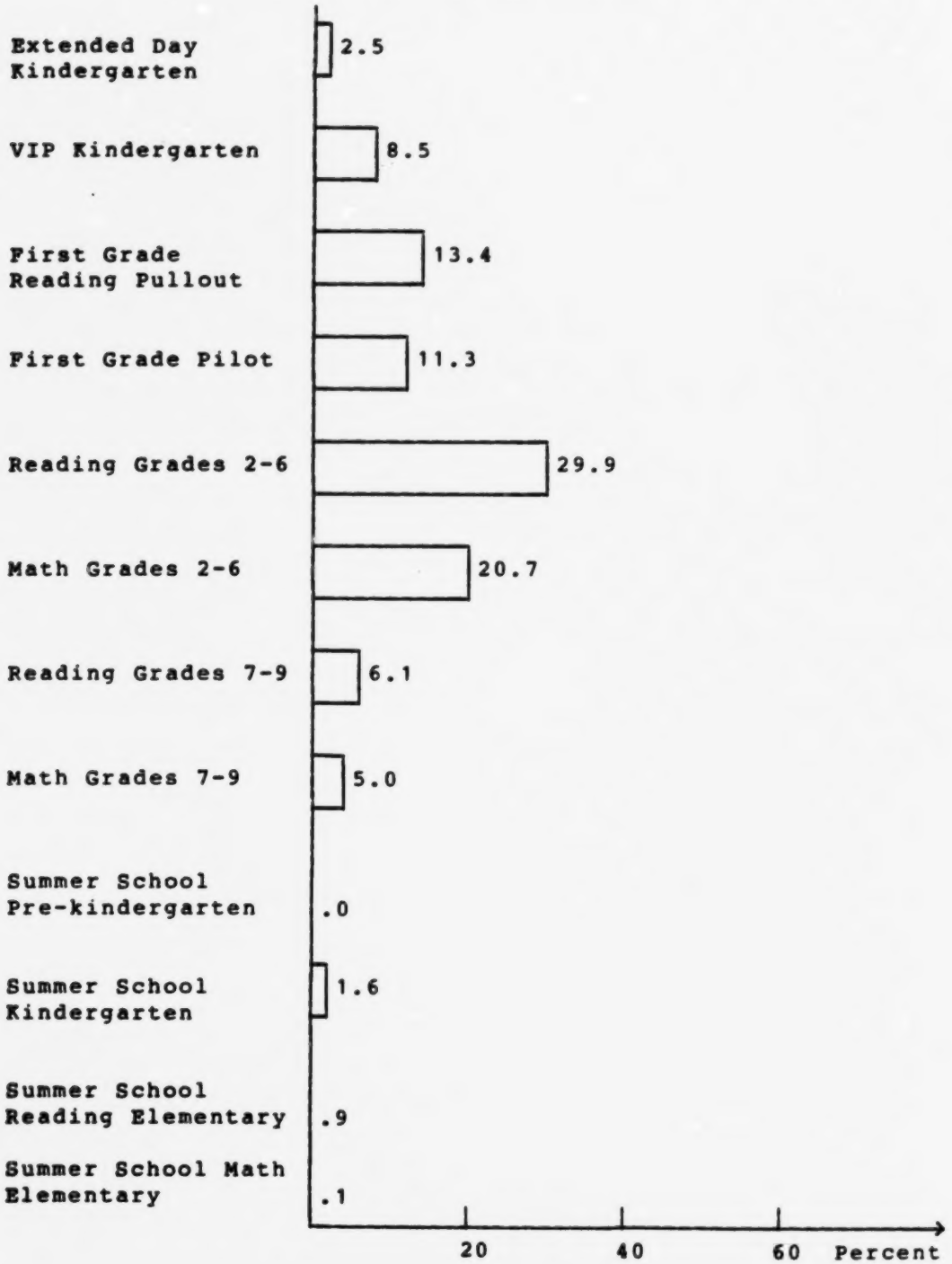

Figure 4.2

Proportion of Programs in Chapter 1, 1982-83

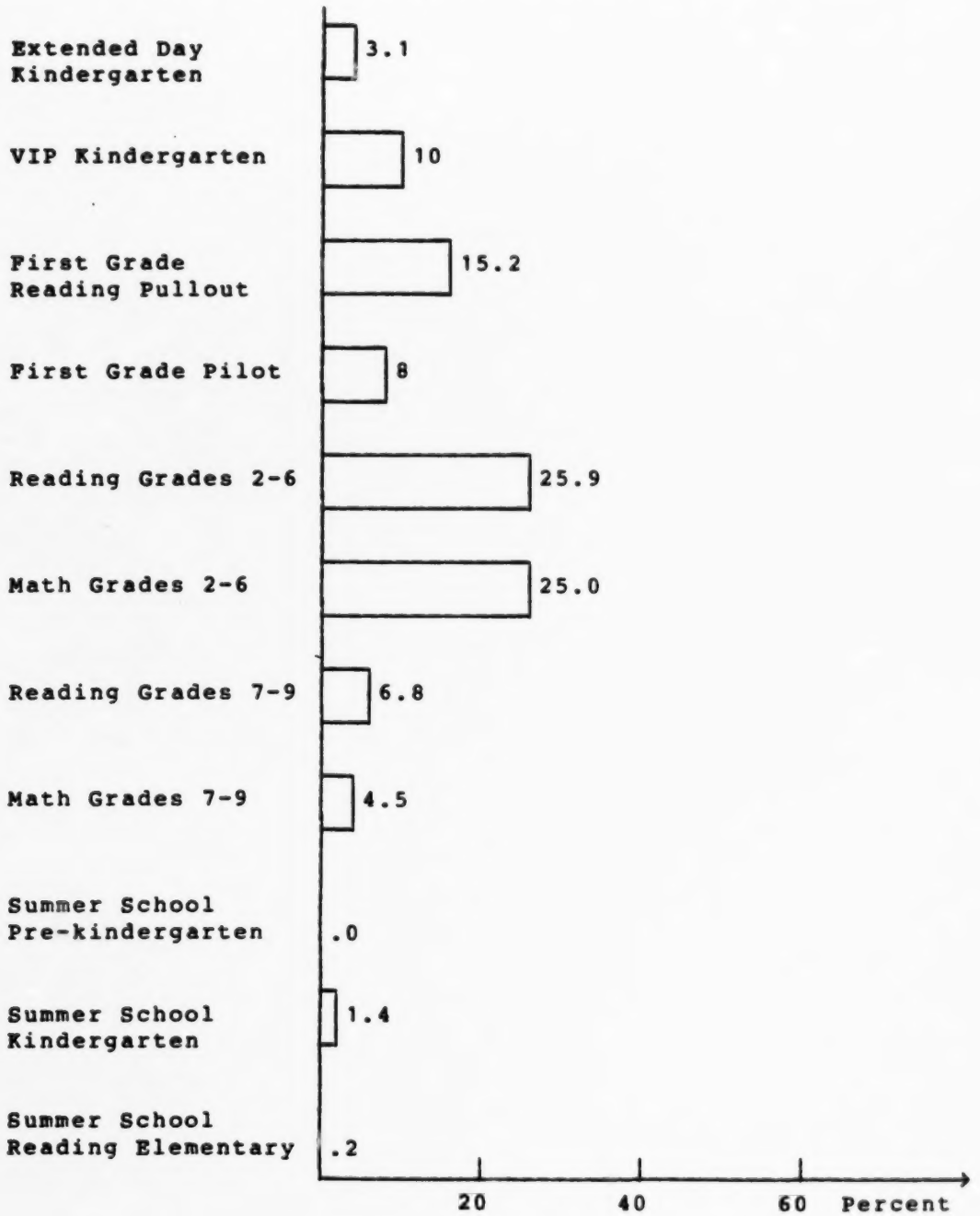

Figure 4.3

Proportion of Programs in Chapter 1, 1983-84

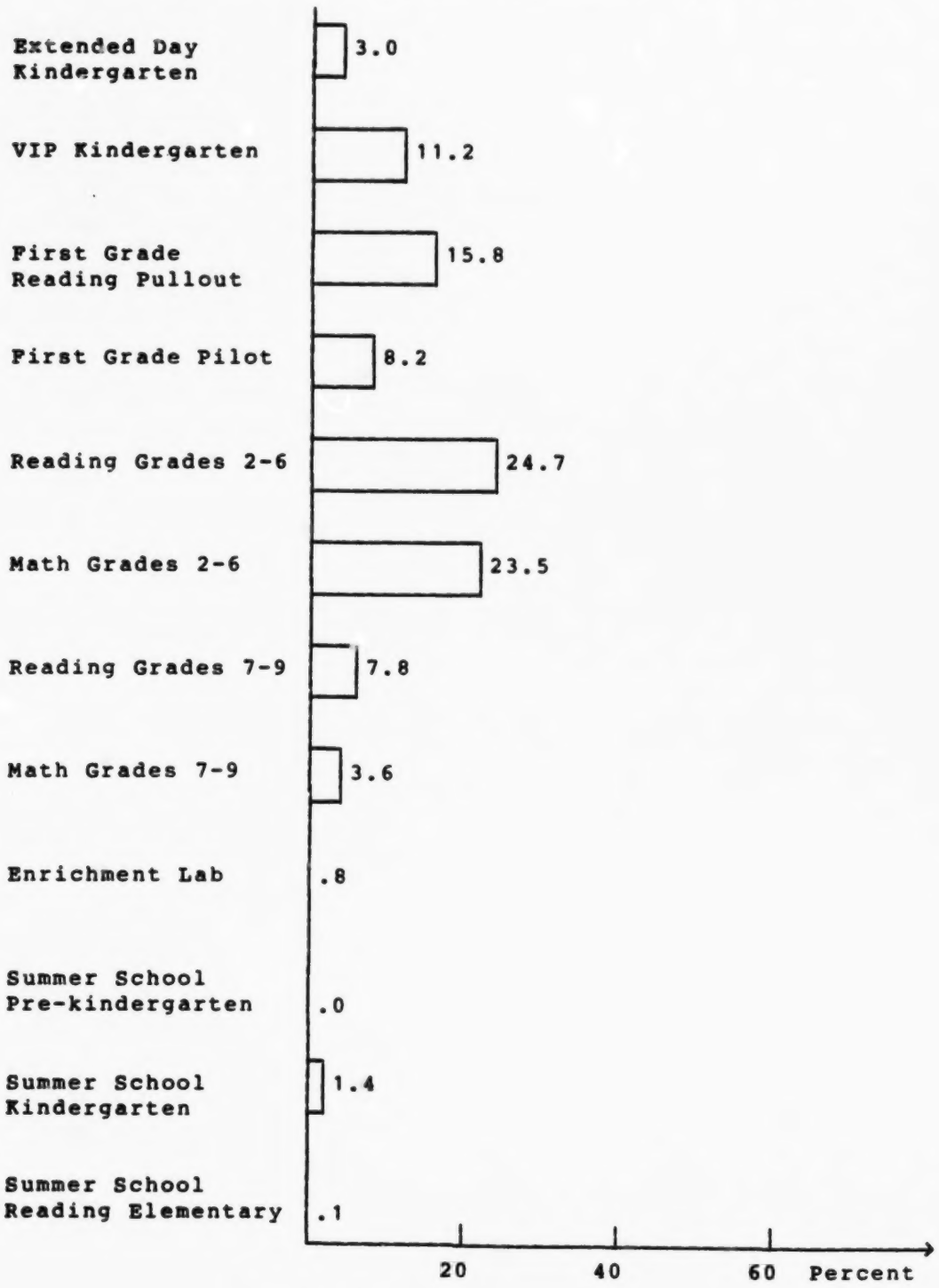

Figure 4.4

Research Question 5 - What is the proportion of students receiving multiple services in Chapter 1?

Tables 5.1 to 5.4 report by year and program the number and percent of Chapter 1 participants with multiple services. A participant was included in this analysis when two or three program codes in Chapter 1 were associated with the student number.

Overall, an average of less than 40 percent of the Chapter 1 students had multiple services in the four years under study. The greatest change was observed between 1980-81 to 1981-82 when the percentage of students with multiple service rose from 34.3 percent to 41.3 percent of the Chapter 1 served students. In the subsequent years, the share decreased to 39.1 percent in 1982-83 and 38.1 percent in 1983-84.

The composition of feeder programs changed during the four years under study, corresponding to the increasing number of kindergarten and first grade children in Chapter 1 services. The share of participants in reading programs for grades two through six decreased from 52 percent of all multiple service recipients in 1980-81 to 34 percent in 1983-84. During the same time period, the share of participants in the first grade reading pullout rose from 17 percent to 27.5 percent of the multiple service recipients in Chapter 1. Emphasis of second services was on math programs and summer school services in reading and math.

In 1980-81, 752 Chapter 1 students were recorded in multiple services (see Table 5.1). The majority of these students (394, 52.4%) were recorded in the reading program for grades two through six. Fifty-one point five percent of participants in the reading program also received math services in these grades. Twenty-six percent of the participants in the reading program, grades two through six, also attended the summer school reading program, while 19.3 percent were in the summer school math program. Three point three percent were duplicate counts in the reading program for grades two through three. According to the Chapter 1 program director, the major reason for the frequent occurrence of duplicate counts across programs and years is the high mobility of the Chapter 1 population. A student's move from one Chapter 1 school to another Chapter 1 school will result in the assignment of a second program code although the student stays in the same Chapter 1 service.

Of the 34 students in the math program for grades two through six with multiple services, equal shares were in the summer reading program (41.2 percent) and the summer math program (41.2 percent). The remaining 17.6 percent were duplicate counts.

Table 5.1
Students in Chapter 1 Who Received Two or More
Chapter 1 Services by Program, 1980-81

Chapter 1 Program Code (First Record of Student)		Chapter 1 Program Code (Second and Third Record)																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Percent
1	Ext. Day Kdg.																	
2	Very Inv. Parent Kdg.																	
3	1st Gr. Reading Pullout			18 14.3		1 .8	1 .8						54 42.8		52 41.3		126	16.7
4	1st Gr. Pilot																	
5	Reading Gr. 2-6					13 3.3	203 51.5						102 25.9		76 19.3		394	52.4
6	Math Gr. 2-6						6 17.6						14 41.2		14 41.2		34	4.5
7	Reading Gr. 7-9							23 15.4	92 61.7					21 14.1		13 8.7	149	19.8
8	Math Gr. 7-9								3 13.6					4 18.8		15 68.2	22	2.9
9	Enrich. Lab																	
10	Summer School Pre-k																	
11	Summer School Kdg.																	
12	Summer School Reading Elem.																	
13	Summer School Reading Jr. High																	
14	Summer School Math Elem.												1 3.8		25 96.2		26	3.4
15	Summer School Math Jr. High															1 100		.13
																	752	100

One hundred and forty-nine students with multiple service in Chapter 1 (19.8 percent) were in the reading program for grades seven through nine. Sixty-one point seven percent of these students were served by the math program in these grades. Fourteen percent were in the summer reading program, and just under 9 percent attended the summer math program.

Of the 22 participants in the math program for grades seven through nine, 18 percent were in the summer reading program, while 68.2 percent attended the summer math program.

Of the 126 students in the first grade reading pullout who had multiple service, 42.8 percent attended the summer reading program for these grades, while a slightly smaller percentage (41.5 percent) was recorded in the summer math program.

In 1981-82, 943 Chapter 1 students were recorded in multiple services (see Table 5.2). Just under 43 percent of these students (403) were recorded in the reading program for grades two through six. One-third of the participants in the reading program (135) also received services in the math program for these grades during the school year. Just over one-third were also served in the summer reading program, while 27.5 percent attended the summer math program.

The second largest group of multiple Chapter 1 service recipients is the first grade reading pullout program with 253 students (27 percent). Forty-four point seven percent of these students were also recorded in the first grade pilot program. Thirty-one percent participated in the summer reading program, and 17.3 percent in the summer math program.

The third group of multiple service recipients includes the 102 students (10.8 percent) in the math program for grades two through six. About equal shares of this group also attended summer programs in reading (46.1 percent and math 45.1 percent).

The 64 participants in the junior high reading program made up just under 7 percent of multiple service recipients in Chapter 1 in 1982-83. Ninety-two point two percent of these students also received services in the math program, while the remainder was served in equal shares of 3.1 percent by the summer programs in reading and math.

Finally, there is a small group of 35 students (3.7 percent) with multiple service in Chapter 1 programs orientated to the kindergarten level, that is, the extended day kindergarten and the VIP kindergarten. Most of these students are also served in the summer school kindergarten

Table 5.2
Students in Chapter 1 Who Received Two or More
Chapter 1 Services by Program, 1981-82

Chapter 1 Program Code (First Record of Student)		Chapter 1 Program Code (Second and Third Record)																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Percent
1	Ext. Day Kdg.											13 100					13	1.4
2	Very Inv. Parent Kdg.		1 4.5	2 9.1								18 81.8	1 4.5				22	2.3
3	1st Gr. Reading Pullout			16 6.3	113 44.7							2 .8	78 30.8		44 17.4		253	26.8
4	1st Gr. Pilot				4 7.3		1 1.8						26 47.3		24 43.6		55	5.8
5	Reading Gr. 2-6					22 5.4	135 33.5						135 33.5		111 27.5		403	42.7
6	Math Gr. 2-6						9 8.8						47 46.1		46 45.1		102	10.8
7	Reading Gr. 7-9							1 1.6	59 92.2				2 3.1		2 3.1		64	6.8
8	Math Gr. 7-9																	
9	Enrich. Lab																	
10	Summer School Pre-k																	
11	Summer School Kdg.																	
12	Summer School Reading Elem.																	
13	Summer School Reading Jr. High											1 33.3	1 33.3		1 33.3		3	.3
14	Summer School Math Elem.												1 3.6		27 96.4		28	2.9
15	Summer School Math Jr. High																	
																	943	100

(84 percent), while 8 percent were in the first grade reading pullout, and 4 percent attended the summer reading program. (The remaining 4 percent were duplicate counts in the VIP kindergarten program).

Nine hundred and twenty-five Chapter 1 students were recorded in multiple services in 1982-83 (see table 5.3). Three hundred and thirty-four, or 36 percent, of these students attended the reading program in grades two through six. Of these students, 25.8 percent also received services in the math program for these grades, 37.5 percent were served in the summer reading program, and 34 percent attended the summer math program. Five point five percent of the reading programs for grades two through six were duplicate counts.

The second largest group of multiple service recipients in Chapter 1 was the first grade reading pullout program with 236 students (25.5 percent). Forty-two point four percent of these students also participated in the first grade pilot program, 29 percent were recorded in the summer reading program, and just under 22 percent were also served in the summer math program. About 5.5 percent of the reading pullout participants were duplicate counts.

The third largest group of multiple service recipients contains the 153 students in the math program for grades two through six (16.5 percent). About equal shares of this group also received services in the summer programs of reading (47.7 percent) and math (49.7 percent).

The 78 participants in the junior high reading program represented about 8.4 percent of the multiple service recipients in Chapter 1 in the year 1982-83. Ninety-five percent of these students were also recorded in the math program for grades seven through nine. Five percent of the participants in the junior high program were duplicate counts.

The last major group contains 68 students (7.3 percent) in the programs of extended day kindergarten and VIP kindergarten.

Seventy-three point five percent of these students were also served in the summer kindergarten program. Just under 3 percent were recorded in the summer programs for reading and math. A high share of 19 percent of the children with multiple Chapter 1 service was counted twice (in the VIP program).

Five point four percent of students with multiple service in Chapter 1 were participants in the first grade pullout program. Equal shares of this group were found in the summer programs for reading (48 percent) and math (48 percent).

Table 5.3
Students in Chapter 1 Who Received Two or More
Chapter 1 Services by Program, 1982-83

Chapter 1 Program Code (First Record of Student)		Chapter 1 Program Code (Second and Third Record)																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Percent
1	Ext. Day Kdg.			1 6.7							1 6.7	13 86.7					15	1.6
2	Very Inv. Parent Kdg.		13 24.5			1 1.9						37 69.8	1 1.9		1 1.9		53	5.7
3	1st Gr. Reading Pullout			13 5.5	101 42.8	1 .4							69 29.2		52 22.0		236	25.5
4	1st Gr. Pilot				1 2.0		1 2.0						24 48.0		24 48.0		50	5.4
5	Reading Gr. 2-6					9 2.7	86 25.7						125 37.4		113 33.8		334	36.1
6	Math Gr. 2-6						4 2.6						76 47.7		76 49.7		153	16.5
7	Reading Gr. 7-9							4 5.1	74 94.9								78	8.4
8	Math Gr. 7-9								1 100								1	.1
9	Enrich. Lab																	
10	Summer School Pre-k																	
11	Summer School Kdg.																	
12	Summer School Reading Elem.																	
13	Summer School Reading Jr. High																	
14	Summer School Math Elem.												6 100				6	.6
15	Summer School Math Jr. High																	
																	925	100

Overall, the primary focus is as strong as in the previous years, however, 1982-83 displays an increasing tendency of multiple services to students in kindergarten, corresponding to the increased share of kindergarten children recorded in Chapter 1.

In 1983-84, 948 Chapter 1 students were recorded in multiple services (see Table 5.4). Just over one-third (321) of these students were in the reading program for grades two through six. In this group, 26.5 percent also were served in the math program, while just under 32 percent (102) attended the summer reading program, and 27 percent were in the summer math program for elementary grades. About 13 percent (41) were duplicate counts.

The 260 students (27.4 percent) of the reading pullout program represent the second largest group of Chapter 1 participants with multiple services. About one-half (48.8 percent or 127 students) of them also attended the first grade pilot program. Seventeen point four percent (56) were in the summer reading program, and 13.7 percent (44 students) were served in the summer math program. Eight point seven percent were duplicate counts.

A third group includes participants in the math program for grades two through six (141 students or 14.9 percent). Equal shares of 43.3 percent of these students were also served in the summer programs in reading and math. Thirteen point four percent were duplicate counts.

Just under 10 percent (93) of the students with multiple service in Chapter 1 were participants of the reading program in junior high. Eighty-six percent of these students were also recorded in the respective math program during the school year. Thirteen students (13.9 percent) were duplicate counts.

Seventy-two students with multiple service in Chapter 1 were in kindergarten programs (7.6 percent) with 28 percent in the extended day kindergarten and 72 percent in the VIP kindergarten. Two-thirds of the students in these two groups also were served in the summer kindergarten, while 7 percent were in the first grade reading pullout program.

Research Question 6 - What is the frequency with which students who exit other categorical programs are placed in Chapter 1?

The three categorical programs varied considerably in regard to the number of participants who exited into Chapter 1 (Table 6.1).

The ESL program showed consistently and by a wide margin the highest shares of participants exiting into Chapter 1.

Table 5.4
Students in Chapter 1 Who Received Two or More
Chapter 1 Services by Program, 1983-84

Chapter 1 Program Code (First Record of Student)		Chapter 1 Program Code (Second and Third Record)																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Percent
1	Ent. Day Kdg.	2 10.0	1 5.0	1 5.0								16 80.0					20	2.1
2	Very Inv. Parent Kdg.		13 25.0	4 7.7				2 3.8			1 1.9	32 61.5					52	5.5
3	1st Gr. Reading Pullout			28 10.8	127 48.8	2 .77				2 .77		1 .38	56 21.5		44 16.9		260	27.4
4	1st Gr. Pilot				4 7.7					1 3.8		1 3.8	23 44.2		23 44.2		52	5.5
5	Reading Gr. 2-6					41 12.8	85 26.5			5 1.5		1 .3	102 31.8		87 27.1		321	33.9
6	Math Gr. 2-6						19 13.5						61 43.3		61 43.3		141	14.9
7	Reading Gr. 7-9							13 14.0	80 86.0								93	9.8
8	Math Gr. 7-9								4 100								4	.4
9	Enrich. Lab												1 50.0		1 50.0		2	.2
10	Summer School Pre-k																	
11	Summer School Kdg.																	
12	Summer School Reading Elem.																	
13	Summer School Reading Jr. High																	
14	Summer School Math Elem.														2 100		2	.2
15	Summer School Math Jr. High																	
																	948	100

In 1981-82, 30.5 percent of the program participants were placed in Chapter 1, decreasing to 25.0 percent in 1982-83, and 22.4 percent in 1983-84. For the Indian Education program, the percentage of students exiting into Chapter 1 ranged from a low of 2.0 percent in 1982-83 to a high of 7.0 percent in 1983-84. For the Migrant program the percentages were 3.3 percent in 1982-83 and 5.3 percent in 1983-84.

In all programs, the majority of the students were placed in reading and math programs for grades two through six.

Table 6.1
Percent of Students Exiting from Categorical Programs into Chapter 1 Services, 1981-82 to 1983-84

	1981-82	1982-83	1983-84
Indian Education	3.4	2.0	6.8
Migrant Program	N/A*	3.3	5.3
ESL	30.5	25.0	22.4

*N/A - Not Available

Indian Education

Six of the students (3.4 percent) participating in the 1980-81 Indian Education program were placed in Chapter 1 in 1981-82. Four of these students (66.7 percent) entered the reading program for grades two through six, one student was placed in the corresponding math program, and one student entered the math program for grades seven through nine.

Four participants of the 1981-82 Indian Education program (2.0 percent) entered Chapter 1 services in 1982-83. Three students (75 percent) were placed in the reading program for grades two through six, and one student entered the math program for grades seven through nine.

Nineteen participants exiting the 1982-83 Indian Education program (6.8 percent) entered Chapter 1 in 1983-84. Four students (21.1 percent) were placed in the reading program for grades two through six, and eight students (42.1 percent) entered the corresponding math program. Three were (16 percent) placed in the reading program for grades seven through nine. Four students (21 percent) entered the first grade reading pullout and pilot programs.

Migrant Education

Six participants of the 1981-82 Migrant Education program

(3.3 percent) were placed in Chapter 1 services in 1982-83. Three of these students (50.0 percent) were placed in the math program for grades two through six, the three other students were placed in the first grade pilot program, the reading program for grades seven through nine, and the corresponding math program, respectively.

Twelve students (25 percent) participated in the reading program for grades seven through nine, while one student entered the first grade reading pullout.

Twelve students exiting the 1982-83 Migrant program (5.3 percent) were placed in Chapter 1 in 1983-84. Four of these students (33.3 percent) entered the reading program for grades two through six, while another four students were in the corresponding math program.

Three students were placed in the reading program for grades seven through nine. One student participated in the first grade pullout program.

ESL Program

One hundred and seventy-nine of the students exiting the 1980-81 ESL program (30.5 percent) were placed in Chapter 1 service in 1981-82. Fifty-two percent of these students entered the reading program for grades one through six, and 13 percent were in the corresponding math program. Just under 17 percent were placed in the first grade reading pullout, while 7 percent entered the first grade pilot program.

Six percent of the students exiting ESL were placed in the reading program for grades seven through nine, but only 1 percent attended the corresponding math program. Less than 2 percent of the former ESL students were placed in the two Chapter 1 kindergarten programs (extended day and VIP).

Eighty-seven participants of the 1981-82 ESL program (25 percent) entered Chapter 1 in 1982-83. The majority of these students were placed in programs for grades two through six (48.3 percent in the reading program and 10.3 percent in the math program). Fifteen percent of the students entered the first grade reading pullout, and 12.6 percent were in the first grade pilot program. Twelve point six percent were placed in the reading program for grades seven through nine, and 1.1 percent were in the corresponding math program.

Fifty-six participants exiting the 1982-83 ESL program (22.4 percent) entered Chapter 1 services in 1983-84. Almost two-thirds of these students were placed in reading and math services for grades two through six (41 percent and 25 percent, respectively). Equal shares of just under 11

percent entered the first grade reading pullout and first grade pilot programs. Nine percent of the former ESL students were placed in the reading program for grades seven through nine. Three point six percent were in the VIP kindergarten program.

Research Question 7 - What is the frequency with which students who exit other categorical programs are placed in Chapter 1?

Working backwards from 1984-85 records, this analysis included students who had been in Chapter 1 the previous year but were registered in a categorical program in the subsequent year (see Table 7.1).

Table 7.1
Ex-Chapter 1 Students Placed in Categorical Programs by Year and Program

Students who were in Chapter 1 in the year . . .	were placed the following year in categorical programs . . .					
	Indian Education		Migrant Education		ESL	
	N	%	N	%	N	%
1981-82	44	1.5	83	2.8	104	3.5
1982-83	56	1.7	91	2.8	107	3.3
1983-84	43	1.3	103	3.2	118	3.7

Few Chapter 1 participants exiting the program were placed in one of the categorical programs. The ESL program was found to have the highest share of former Chapter 1 students (3.5 percent), while the Indian Education program had the lowest percentage (1.5 percent on the average). The percentages remained practically unchanged over the four-year time period. Across programs and over time, the predominant pattern was found to be the transfer from Chapter 1 kindergarten and first grade programs. This tendency is consistent with district policy of early problem identification and intervention to serve the low-achieving students according to their special needs.

Research Question 8 - What is the achievement level of Chapter 1 participants in reading and mathematics as measured by the California Achievement Test NCE scores?

Research Question 9 - What is the achievement level of Chapter 1 participants in reading and mathematics as measured by the California Achievement Test NCE scores?

The tests given to program participants in all four years of the study included the reading total and the math computation sections of the California Achievement Test (CAT). The normal curve equivalent scores (NCE) of the spring tests were used for all analyses.

In reviewing the results of these analyses, the reader should keep in mind that students qualified for Chapter 1 service when their test scores were at or below the 25th percentile on the norm referenced CAT-C. If a student scored above the program selection cut off in a given year, the student most probably would not be in Chapter 1 the subsequent year. It should also be recalled that the average length of service was 1.4 years with 71 percent of all Chapter 1 students participating for one year. This pattern renders only a small sample for longitudinal investigation.

The analyses focus on students with normal grade progress and extensive Chapter 1 service who entered the Chapter 1 program as first graders in 1980-81 and were in grade four in 1983-84. Students included in one test cycle were excluded from a second test cycle if test scores were missing for that cycle, with the result that sample sizes and NCE means in overlapping test cycles do not always match.

Table 8.1 contains data for students who were in the fourth grade in year four of the study, had Chapter 1 service in the previous three years but were not served in year four.

Table 8.2 presents data for students who attended fourth grade in year four and were Chapter 1 participants during the entire four-year period under study.

These data can be summarized as follows:

1. Chapter 1 students with three or four years of service scored between the 35th and 47th NCE in the spring CAT tests of reading and math. This performance corresponds to an achievement level between the 23rd and the 43rd percentile.

2. In all grades and over the four years under study, math average scores (from the 39th to the 47th NCE or between the 30th and 43rd percentile) tended to be higher than average reading scores (from the 35th to 45th NCE or between the 23rd to 40th percentile).

3. As the years of Chapter 1 participation increased from three to four years, there was a decline in the average NCE scores in both the reading and mathematics tests.

Table 8.1
Mean Reading and Math NCE Scores in Three Spring Cycles of the CAT-C Test of Ex-Chapter 1 Students in 1983-84 Who Entered Chapter 1 as First Graders in 1980-81 and Had Three Years of Service

1980-81 to 1981-82	Number of Students	NCE Spring 1980-81 Mean	SD	NCE Spring 1981-82 Mean	SD	NCE Changes Mean	SD
Reading	76	43.1	13.7	35.5	10.9	-7.6	15.2
Math	73	46.7	16.4	40.9	13.3	-5.8	17.9
1981-82 to 1982-83	**Number of Students**	**NCE Spring 1981-82 Mean**	**SD**	**NCE Spring 1982-83 Mean**	**SD**	**NCE Changes Mean**	**SD**
Reading	77	35.2	11.3	39.7	11.6	4.5	12.8
Math	76	40.9	13.3	44.9	17.5	3.9	17.3
1982-83 to 1983-84	**Number of Students**	**NCE Spring 1982-83 Mean**	**SD**	**NCE Spring 1983-84 Mean**	**SD**	**NCE Changes Mean**	**SD**
Reading	79	39.4	11.6	38.9	9.7	-.5	9.2
Math	78	44.0	17.7	41.5	15.5	-2.5	15.7

Table 8.2

Mean Reading and Math NCE Scores ir Three Spring Cycles of the CAT-C Test of Chapter 1 Students Who Entered Chapter 1 as First Graders in 1980-81 and Had Four Years of Service

1980-81 to 1981-82	Number of Students	NCE Spring 1980-81 Mean	SD	NCE Spring 1981-82 Mean	SD	NCE Changes Mean	SD
Reading	45	44.9	14.4	34.6	9.6	-10.3	15.9
Math	42	47.2	16.8	38.5	12.4	-8.7	17.9
1981-82 to 1982-83	**Number of Students**	**NCE Spring 1981-82 Mean**	**SD**	**NCE Spring 1982-83 Mean**	**SD**	**NCE Changes Mean**	**SD**
Reading	45	34.7	9.5	39.3	9.9	4.6	11.2
Math	44	38.6	12.2	40.7	16.9	2.1	15.9
1982-83 to 1983-84	**Number of Students**	**NCE Spring 1982-83 Mean**	**SD**	**NCE Spring 1983-84 Mean**	**SD**	**NCE Changes Mean**	**SD**
Reading	47	39.1	9.9	38.5	9.5	-.66	10.3
Math	47	39.9	16.8	39.6	14.5	-.36	17.8

4. Gains made in Chapter 1 from 1981-82 to 1982-83 were not sustained, regardless of length of service.

Research Question 10 - Is the retention rate for Chapter 1 participants different from the retention rate of the participants in the other categorical programs with similar achievement levels?

Summary

As compared to the Indian Education program, the Migrant program, and the ESL program, Chapter 1 showed consistently the lowest retention rates during the four years under study (an average 2.5 percent). Average retention rates for the other programs were four percent in the Migrant program, 5.2 percent in the Indian Education program, and 8.7 percent in the ESL program. Chapter 1 and the Migrant program maintained relatively stable retention rates from 1980-81 to 1983-84, while the Indian Education and ESL showed great fluctuation in their retention rates.

In all programs, the emphasis was on retaining students in their early grades, although retention rates in advanced grades (especially grades seven and eight) appeared to be increasing from 1980-81 through 1983-84. Tables 10.1 through 10.4 display number and percent of students retained for each program by year and grade. In reviewing the findings, two points should be kept in mind:

1. The records on retention and promotion of students are pulled from the school district's "Student Extract Tape" and do not perfectly match the records on participants in categorical programs.

2. Retention rates by grade are based on extremely varied total counts of students which at times are lower than three. This is especially true for advanced grades in elementary school and high school since all programs focus on the early primary grades.

The overall percentage of Chapter 1 students who were retained remained between 2 and 3 percent in the four years under study. However, higher rates of retention were found in the early grades ranging between 3 and 8 percent. For the last three years, Chapter 1 students in grade eight show a high retention rate between 50 and 100 percent.

For first graders, the Chapter 1 retention rate was 5.2 percent in 1980-81, reached a peak at 8.4 percent in 1982-83 and declined to 6.4 percent in 1983-84.

In 1980-81, the overall retention rate in Chapter 1 was 2.3

percent (see Table 10.1). Retention was highest in grade one (5.2 percent) and grade three (3.5 percent), while the rates in grade two and grades four through seven ranged from .4 percent to 2.1 percent.

Table 10.1
Students Retained in Chapter 1, 1980-81 to 1983-84

Grade	1980-81 N	%	Total	1981-82 N	%	Total	1982-83 N	%	Total	1983-84 N	%	Total
K	0	0	0	0	0	0	0	0	0	2	50.0	4
1	17	5.2	327	37	7.3	286	44	8.4	522	36	6.4	559
2	5	2.0	251	10	3.6	275	6	2.0	296	9	2.9	308
3	8	3.5	229	5	1.9	265	6	2.5	243	3	1.2	253
4	4	1.7	236	2	.9	227	2	.7	269	7	2.8	248
5	3	1.2	253	2	.8	251	1	.4	264	3	1.0	288
6	3	1.2	243	0	0	249	1	.3	297	0	0	238
7	1	.4	237	2	66.7	3	3	2.2	139	2	1.2	163
8	0	0	1	2	100.0	2	2	50.0	4	3	100.0	3
9	0	0	1	0	0	0	0	0	0	0	0	0
Total	41	2.3	1,778	60	3.4	1,781	65	3.2	2,035	65	3.1	2,064

Table 10.2
Students Retained in Indian Education,
1980-81 to 1983-84

Grade	1980-81 N	%	Total	1981-82 N	%	Total	1982-83 N	%	Total	1983-84 N	%	Total
1	1	12.5	8	1	12.5	8	4	18.2	22	4	16	25
2	0	0	20	3	12.0	25	1	4.8	21	0	0	23
3	1	5.9	17	0	0	19	0	0	21	1	5.9	17
4	0	0	25	1	5.6	18	0	0	19	0	0	17
5	0	0	23	0	0	23	0	0	25	1	4.2	24
6	0	0	12	0	0	21	1	3.4	29	0	0	23
7	1	4.2	24	1	100.0	1	0	0	31	4	14.3	28
8							2	66.7	3	2	100.0	2
9							1	100.0	1	1	100.0	1
Total	3	2.3	129	6	5.2	115	9	5.2	172	13	8.1	160

Table 10.3
Students Retained in Migrant Education,
1980-81 to 1983-84

Grade	1980-81			1981-82			1982-83			1983-84		
	N	%	Total	N	%	Total	N	%	Total	N	%	Total
1	No Records			4	16.0	25	6	20.7	29	5	22.7	22
2				1	5.0	20	0	0	28	1	3.1	32
3				1	4.0	25	0	0	20	0	0	27
4				0	0	31	0	0	22	1	3.7	27
5				0	0	26	0	0	32	1	3.4	29
6				0	0	23	0	0	22	0	0	33
7							0	0	20	0	0	27
8							0	0	2	0	0	2
9							0	0	1	0	0	1
10							0	0	1			
12										1	100.0	1
Total				6	4.0	150	6	3.4	177	9	4.5	201

Table 10.4
Students Retained in ESL Education,
1980-81 to 1983-84

Grade	1980-81			1981-82			1982-83			1983-84		
	N	%	Total	N	%	Total	N	%	Total	N	%	Total
1	16	13.4	119	12	14.3	84	18	29.5	61	15	24.2	62
2	4	3.8	104	6	12.5	48	1	4.0	25	2	4.4	45
3	3	3.6	83	1	2.4	41	1	3.1	32	1	4.0	25
4	1	2.2	46	1	3.7	27	0	0	22	0	0	19
5	0	0	30	0	0	21	0	0	18	0	0	17
6	1	5.9	17	1	4.5	22	0	0	10	0	0	15
7	0	0	20	0	0	1	0	0	13	0	0	11
8				0	0	2				0	0	1
9							0	0	2	0	0	1
Total	25	6.0	419	21	8.5	246	20	10.9	183	18	9.2	196

In 1981-82, the overall retention rate increased to 3.4 percent. However, unusually high retention rates were found in grade eight (all of the Chapter 1 students retained) and grade seven (two-thirds of Chapter 1 students retained). In grade one, 7.3 percent of the Chapter 1 participants were retained, while the rate in grade two was 3.6 percent.

In 1982-83, the overall retention rate in Chapter 1 declined to 3.2 percent. Fifty percent of the Chapter 1 students in grade eight were retained and 8.4 percent of program participants in grade one. Retention rates of Chapter 1 students in grades two through seven ranged between .3 percent and 2.2 percent.

In 1983-84, the overall retention rate in Chapter 1 was 3.1 percent. Six point four percent of the Chapter 1 students in grade one were retained, while the retention rates in grades two through seven ranged between 1.0 and 2.9 percent of program participants. Again, grade eight showed the highest rate of retention (100 percent). For the first time in the period under study, kindergarten students are accounted for in the records. Fifty percent of the Chapter 1 kindergarten students were retained.

Overall, retention of students in the Indian Education program showed a pattern of increasing rates in the four years under study. Starting from a retention rate similar to Chapter 1 (2.3 percent) in 1980-81, the rate rose to 5.2 percent in 1981-82. In 1982-83, there was no change, but in 1983-84 the retention rate increased to 8 percent. Retention was especially high in first grade.

The retention rate of the first graders remained at 12.5 percent in the first two years, rose to 18.1 percent in 1982-83, and declined to 16 percent in 1983-84. Retention tended to be highest in grades seven and eight with rates ranging from 14 to 100 percent.

In the Migrant Education program, retention rates remained stable at about four percent during the three years for which records were available (1981-82 to 1983-84). Emphasis was on early retention, and retention rates in first grade ranged between 16 and 23 percent.

The ESL program showed the highest retention rate of all four programs. From a low of 6 percent in 1980-81, the rate rose to 8.5 percent in 1981-82, peaked at 11.0 percent in 1982-83, and dropped to 9.2 percent of the ESL students. Retention was found increasingly in entry grades. The retention rate in first grade rose from 13 percent in 1980-81 to 30 percent in 1982-83, and decreased to 24 percent in 1983-84.

PART III

DESCRIPTION OF REGION AND SCHOOL DISTRICT

The city of Mesa is located 15 miles east from Phoenix and is Arizona's third largest city. The Mesa Public Schools enrolled 51,555 students in the 1985-86 school year.* The majority of these students are from the city of Mesa. However, the city encompasses approximately 80 square miles, compared to the school district which encompasses 200 square miles. The population served by the city is approximately 195,000 compared to an estimated district population of 270,000.

The Mesa School District represents an upper middle class population in a heavily urban setting with a small rural farming area in the northern most sections of the district. Another rural area is located in the eastern portion of the district. The median household income is $26,900. Twenty-five percent of the adults graduated from college.

The school district is comprised of 53 schools, 35 elementary schools, eight junior high schools, four comprehensive high schools, and six special schools.* Two major facilities that fall under the special school category are Parkway School which is for trainably mentally handicapped youngsters and Mesa Vo-Tech which accepts full or part-time students and is an alternative to the offerings at the comprehensive high schools.

The ethnic majority in the school district is Anglo white, constituting 84 percent of the school population. Students with Spanish surnames constitute the major ethnic minority group (10 percent), with the second largest minority group being Native American (2 percent). Black students also compose 2 percent of the school population and Pacific Islanders, 1 percent.

PART IV

DESCRIPTION OF CHAPTER 1 PROGRAM

Eligibility

District schools qualify for Chapter 1 services based upon the enrollment of students in economic need. This is determined by the number of students in the free and reduced-price lunch program. Nonprofit, private, and parochial schools may also participate in Chapter 1.

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*Weekly membership report 5/23/86: Total Elementary School, 36,958; Total High School, 13,543; Total Special Education, 1,054.

Once Chapter 1 is part of a school, any student enrolled there who needs extra help in reading or math is eligible regardless of family income. Federal restrictions and limited funding restrict the number of schools and students served by Chapter 1. Students enter Chapter 1 programs based upon test results to make sure help is provided to students most in need.

Trained aides, supervised by the district's basic skills resource teachers, and teachers provide personal attention and special learning materials. More than one-third of the aides hold a teaching certificate. Chapter 1 students in prekindergarten, in VIP kindergarten through grade nine, and summer school receive extra help until they reach reading and math test scores attained by their peers.

Services

The Mesa Public Schools Chapter 1 program currently impacts 16 elementary schools and four junior high schools. The specific services are listed on the following pages.

KINDERGARTEN PROGRAMS

Very Involved Parent (V.I.P.) Program

The V.I.P. program serves all kindergarten students at three schools. Parent volunteers, under the direction of a parent facilitator, spend one-half day per week making reading or math readiness games. The following day the parents play the game with small groups of children in the kindergarten classrooms. V.I.P.'s also take these games home to reinforce their children's skills. Nursery services are provided for the preschool children of the parent volunteers.

Extended Day Kindergarten Program

The extended day kindergarten program provides an additional half day of kindergarten to selected students at four schools. Students who scored in the follow-up range in five or more subcategories of the Readiness Skills Inventory (RSI) are eligible for the program. The class size is limited to 15. The program stresses development of the skills needed to enter first grade. Students get extra practice in language development. The focus is also on self-concept and motor skills. While students scoring in the follow-up range in most categories of the RSI are given the first option for entering the program, in some cases these students are considered too immature to handle a full day of school and are not served.

FIRST GRADE PILOT PROGRAM

The first grade pilot program is implemented at three schools. This program provides a first grade teacher to reduce class load for those students qualifying for Chapter 1 services. The focus is on highly individualized instruction in the basic skills areas.

READING, GRADES 1-3

Students eligible for reading services in the primary grades are served by district and Chapter 1 aides through a pull-out program at 16 schools.

READING, GRADES 4-6

At four schools, students in the Chapter 1 reading program in grades four through six receive services from instructional reading aides on a pull-out basis. Chapter 1 students in the reading programs work in groups of up to five children for 30 minutes a day. Teachers identify their weaknesses. Instructional aides stress those skills when they give students extra assistance.

MATH, GRADES 4-6

Chapter 1 aides serve math students, grades four through six, with a pull-out program at 16 elementary schools. Students work on math skills they haven't mastered. In small groups, instructional aides help them for a half hour each day. Students are evaluated with the Math Computation subtest of the ITBS.

JUNIOR HIGH READING AND MATH, GRADES 7-9

Chapter 1 serves reading and math at four junior high schools. Variations exist at each school as to the methods by which students are served. All programs are served by teachers and, except for one program of reading students, have a regular classroom project setting. In the one program reading students are served on a pull-out basis. Computer labs, at some schools, help students to accomplish their goals.

NONPUBLIC SCHOOLS

Two parochial schools, Christ the King and Queen of Peace, receive reading services as part of the Chapter 1 project. One aide at each school serves eligible students.

SUMMER SCHOOL

The district offers a tuition-free summer school each year. Classes include prekindergarten, kindergarten, and reading

and math for Chapter 1 students in grades one through six.

Summer school begins the second week in June. Classes meet five weeks, Monday through Thursday. Parents receive registration forms in the mail. Enrollment is limited, so students are enrolled on a first-come, first-served basis. Transportation is the family's responsibility.

OTHER SERVICES

Chapter 1 has been responsible for administrative direction and control of federal and state allocations to three services for neglected and delinquent students. These services are:

Outreach Services

A nonpublic residential treatment center for predelinquent and delinquent male adolescents. Each year, approximately 27 youth receive tutoring (established in 1974).

Sunshine Acres Remediation Program

An eight-week summer school program which stresses reading and math remediation for students, kindergarten through eighth grade (established in 1972).

Prehab of Arizona

A nonpublic residential treatment facility for boys and girls in grades seven through 12 with behavior and learning problems (established in 1977).

DESCRIPTION OF INDIAN EDUCATION PROGRAM

In 1985-86, Indian students comprised 2.3 percent of the student population (1,163 of 51,613).* The Indian education program provides special services for this group.

Eligibility

Title IV-A, (PIPO) requires a tribal enrollment or census number for each child, a parent, or grandparent.

JOM (Johnson-O'Malley) requires the child to be one-quarter Indian blood and live off the reservation (in-town). Also, the form must be renewed every three years.

Funding Sources

Title IV-A, Project for Indian Pupil Opportunity (PIPO) is a

*As of September 10, 1985.

federal program that provides services for all Indian students. The second source of funds is the Johnson-O'Malley (JOM) program. This provides funds for Indian students living off the reservation.

Services

The Mesa Public Schools Indian Education program provides special services for the district's Indian students. Funds are available to provide for the following:

Tutoring services in eight elementary schools, four junior high schools, and one special school.

A Cultural Resource Center to enable teachers to better instruct all children in Indian cultures.

A Cultural Resource Specialist who can conduct cultural presentations to Indian and non-Indian students in elementary and junior high schools.

Student financial assistance to pay for certain student fees (available only to those students living off the reservation. Included are: textbooks, notebooks, graduation fees, and school supplies.

DESCRIPTION OF ENGLISH AS A SECOND LANGUAGE PROGRAM

The Department of English as a Second Language serves students of varied nationalities who speak little or no English when they enroll in the district.

Eligibility

Non-English and limited English speaking students who need assistance in understanding, speaking, reading, and writing English are referred by school personnel. Students are tested by the ESL/Bilingual staff and placed in specific levels according to their proficiency in English. The district uses the Language Assessment Scale, Informal Oral Language, and other tests. ESL staff members also study the results from achievement and criterion-referenced tests.

A student's primary or home language is other than English if it meets at least one of the following descriptions:

The student's first acquired language is other than English.

The language most often spoken by the student is other than English.

The language most often spoken in the student's home is other than English, regardless of the language spoken

by the student.

Funding Sources

The school district provides most of the funding for English as a Second Language programs. Additional support comes from Chapter 1 and Migrant funds.

Services

The goals of the ESL Department are to develop as quickly as possible:

English listening, speaking, reading, and writing skills.

Competence in basic skills.

Emotional security and confidence in using English at home, at school, and in the community.

Students in kindergarten through 12th grade can learn English as a second language. The program is based at language immersion labs, enrichment labs, and in school resource rooms.

The staff includes an ESL director, secretary, resource specialist, ESL/bilingual/migrant teachers and technicians.

Non-English-speaking students spend five hours each school day in language immersion labs. While they learn English as quickly as possible, a certified bilingual teacher and technician stress basic skills. Lessons are based upon the same topics covered in regular classrooms. Students who have some English skills work in enrichment labs part of the day. However, they spend most of their time learning in the regular classroom.

Students may also receive help from a certified bilingual teacher and technician who travel from school to school. Students leave the regular classroom from one to three periods daily, depending upon how much special instruction they need.

Additional services include testing students in their native languages whenever possible. The ESL staff also interprets at school registration, parent-teacher conferences, special education meetings, and other situations in which parents and children need help in school affairs.

The ESL Department visits students' homes at the request of principals, teachers, nurses, and psychologists. In addition, the Department provides resource material and in-service training for teachers and volunteers.

DESCRIPTION OF MIGRANT CHILD EDUCATION PROGRAM

The Migrant program was established to meet the special needs of children of migratory workers who are in temporary or seasonal employment in agriculture, fishing, or related industries. Since migrant families must frequently move to find work, their children miss out on a continuous learning process. Special academic needs created by this lack of continuity may be further complicated by health and social problems which sometimes result from frequent mobility.

The Migrant program provides instructional and supportive services for migrant students in an effort to minimize their educational difficulties and to promote educational and social growth.

Eligibility

Generally any child (from preschool through 12th grade) not above age 21 is eligible for the Migrant program. Mobility of parents alone does not constitute a child's eligibility. In order to qualify as a migrant child, the child must move with (out of state or from one school district to another) a parent, guardian, or immediate family member seeking seasonal employment.

When the family has ceased to move, the children are eligible for program services up to five years after the last seasonal employment date. The period of eligibility for service does, in fact, extend for six years, including one year of active status and five years of settled-out status.

Funding Sources

The Migrant program is federally funded under the Elementary and Secondary Education Act of 1965. The program operates as a supplement to existing school programs throughout the United States as a supplement to existing school programs.

Services

There are a number of migrant personnel who work in the community. Home/school liaison officers, recruiters, and student advisors are all available to help the migrant child to succeed in school. The program provides the following services:

> Special resource services for migrant students (oral language, reading, and math). There are reading, math, and oral language laboratories at two schools. Students who have difficulty with English receive additional instruction and support from Bilingual Resource and English as a Second Language programs.

Screening for possible physical or medical problems. If problems are found, follow-up medical services are arranged.

Participation in the free lunch or reduced lunch program.

Enrollment in Migrant Child Accident Insurance Program.

Enrollment in Migrant Student Record Transfer System (MSRTS). MSRTS is a computer-based data system which transmits academic, special interest, and health data on every enrolled migrant student. These records follow the migrant student from school district to school district, and from state to state. MSRTS is designed to ensure program continuity for the migrant family, no matter where it moves.

Parental involvement is encouraged in order to provide the basis for meeting the needs of the entire migrant family. Since 1980, a Migrant Parent Advisory Council serves in an advisory capacity to the Migrant program, Governing Board, and school administration.

PARTICIPANTS' CHARACTERISTICS: GRADE LEVEL BY PROGRAM 1980-81 THROUGH 1983-84

Chapter 1 - Participation by Grade Level 1980-81 Through 1983-84

Chapter 1 service is emphasized for students who are developing basic skills. Correspondingly, the percentage of the group served in each grade declines as grade level increases. This finding is consistent across the four years under study. Tables A1a-A1d display the total served and the percentage served by year and grade level for Chapter 1, Indian Education, Migrant and ESL programs. The figures in these tables represent unduplicated counts which were generated by the combination of program codes and sex codes.

Summary

The grade pattern of Chapter 1 services from 1980-81 to 1983-84 displays an increasing emphasis on the early primary level. The share of services directed at the first four elementary grades rose from 50 percent to over 63 percent. The largest relative gain was observed for the participation in first grade which rose from 17 percent of Chapter 1 children in 1980-81 to 27 percent in 1983-84. This development made first grade service the single largest group of Chapter 1 service. In the same time period, the share of participants in upper elementary grades, five and six, fell moderately from 26 percent to 24 percent, while participation in junior high dropped sharply from 24 percent to 13 percent.

A clear increase was found in kindergarten programs. In 1980-81, there was only one such program, the extended day kindergarten. It showed the lowest percentage of participants (1.4 percent) in Chapter 1 programs offered during the school year. In 1981-82, the VIP kindergarten program appeared in the records for the first time. The combined share of the two kindergarten programs rose from 11 percent in 1981-82 to 14.2 percent of the Chapter 1 participants in 1983-84.

In 1980-81, the majority (50.4%) of Chapter 1 served children attended grades one through four. Seventeen percent were served in first grade, while the shares of second to fourth graders ranged between 10 and 12 percent. Upper elementary grades, five and six, served 25.8 percent of the children in about equal shares. Just about 24 percent of Chapter 1 students were junior high school students, the majority of them attending grade 7. High school programs were eliminated in the school year, 1979-80.

In 1981-82, 63 percent of Chapter 1 served children attended grades one through four. However, first graders represented the single largest service group with 27 percent. Upper elementary grades, five and six, served just about 24 percent of the children. The percentage of students served in junior high school dropped by more than 10 points to 13 percent. Also, grades seven through nine were more evenly distributed than in the previous year.

In 1982-83, .1 percent of the Chapter 1 children received services already in kindergarten, while the majority of students (62.4 percent) attended grades one through four; first graders alone represented 26 percent. Upper elementary grades, five and six, served just under 24 percent. Twelve percent of Chapter 1 students were junior high school students, most of them in grades seven and eight.

In 1983-84, .2 percent of the Chapter 1 students were served in kindergarten. Sixty-three point three percent were in grades one through four. Twenty-eight percent of Chapter 1 children were served in first grade. Upper elementary grades, five and six, served 23.4 percent. Thirteen percent of the Chapter 1 children were served on the junior high level with emphasis on grades seven and eight.

Indian Education - Participation by Grade Level
1980-81 Through 1983-84

Summary

The service patterns in Indian Education were distinctly different from the Chapter 1 patterns as summarized in the following points:

Service was more evenly spread out over the primary and junior high level.

Within the primary level, the focus shifted from higher grades in the first two years to first and second grade services in the last two years.

Within the junior high level, emphasis was consistently on grades six and seven, a tendency that is similar to and Chapter 1.

In 1980-81, 40.2 percent of the students in the Indian Education program attended grades one through four, and 21 percent were in the upper elementary grades, five and six. Just under 40 percent were served in junior high school, grades seven through nine.

In 1981-82, grades one through four served 43 percent of the students; just over 26 percent were in grades five and six. Thirty percent were served in junior high school grades seven through nine.

In 1982-83, 38 percent of the students were served in grades one through four, a quarter were in upper elementary grades, and just over 37 percent received services in junior high school.

In 1983-84, 44 percent were in grades one through four, and 21 percent were in the upper elementary grades. Thirty-six percent received services in junior high school.

Migrant Program - Participation by Grade Level
1981-82 Through 1983-84

Summary

Overall, the Migrant program is the program which served the widest range of grades from the primary to the senior high level. However, focus was on grades one through four. Participation was greater in the higher elementary grades, especially grade four, while first graders represented smaller shares of less than 10 percent.

In 1980-81, no records were available for the Migrant program. In 1981-82, just over one-third of migrant students attended grades one through four. Twenty percent were in the upper elementary grades, five and six, while 27 percent were attending junior high grades. Senior high schools still served 17 percent of the migrant students.

As in the previous year, Migrant program services in 1982-83 are distributed in primary, junior high, and senior high

levels. Emphasis was on the primary grades with 34 percent of the program participants served in grades one through four, while just under 24 percent were in upper elementary grades. Junior high served a quarter of the students, and 16 percent were in senior high.

In 1983-84, about one-third of students in the Migrant program attended grades one through four, and 23 percent were in upper elementary grades, five and six. Twenty-three percent were served in junior high school, while just under 20 percent attended senior high school grades.

ESL - Participation by Grade Level
1980-81 Through 1983-84

Summary

Over all four years, ESL showed the strongest enrollment in the primary grades. Emphasis was on first and second grade programs which consistently served close to one-half of all ESL participants with the exception of 1982-83 in which the percentage dropped to 40 percent. The share of ESL served children in grades five and six peaked at 19 percent in 1981-82 and leveled out to around 14 percent in 1983-84. Service in junior high had a low of 7.5 percent in 1981, but it had established a share of just over 16 percent in 1983-84.

In 1980-81, three out of four program participants attended grades one through four. Thirteen percent were in grades five and six, 11 percent in junior high, and 2 percent in senior high schools.

In 1981-82, the ESL program focused on again the primary level, with 72 percent attending grades one through four. Nineteen percent were in grades five and six. Only seven percent received service in junior high, while 1.2 percent attended senior high school.

In 1982-83, services in the ESL program were concentrated in grades one through four (69 percent), while .4 percent attended kindergarten, and 14 percent were in upper elementary grades. However, a stronger emphasis than in the previous two years was placed on junior high service. Sixteen percent of ESL served students attended junior high schools. Just under one percent were in senior high schools.

In 1983-84, more than two-thirds of ESL served children (68 percent) were in primary grades one through four. Just under 15 percent attended grades five and six, while about 16 percent were served in junior high school. One point six percent received services in high school, grades ten and twelve, .4 percent in kindergarten.

Table A1a
Chapter 1 Participants by Grade
1980-81 Through 1983-84

Year	80-81		81-82		82-83		83-84	
Grade	N	%	N	%	N	%	N	%
K					3	.1	4	.2
1	369	16.9	617	27.0	608	25.7	695	27.9
2	245	11.2	291	12.7	329	13.9	339	13.6
3	227	10.4	276	12.1	249	10.5	276	11.1
4	261	11.9	254	11.1	288	12.2	265	10.7
5	286	13.1	265	11.6	288	12.2	317	12.7
6	278	12.7	278	12.2	311	13.2	265	10.7
7	278	12.7	158	6.9	155	6.6	196	7.9
8	156	7.1	109	4.8	104	4.4	110	4.4
9	89	4.1	34	1.5	28	1.2	20	.8
10			1	.0	2	.1		
11			1	.0				
12								
Total	2,189	100.0	2,284	100.0	2,365	100.0	2,487	100.0

Table A1b
Indian Education Participants by Grade
1980-81 Through 1983-84

Year	80-81		81-82		82-83		83-84	
Grade	N	%	N	%	N	%	N	%
1	11	6.2	17	8.6	34	12.3	29	12.1
2	15	8.5	28	14.2	21	7.6	28	11.7
3	18	10.2	18	9.1	26	9.4	23	9.6
4	27	15.3	22	11.2	23	8.3	23	9.6
5	23	13.0	28	14.2	35	12.6	24	10.0
6	14	7.9	24	12.2	35	12.6	26	10.8
7	35	19.8	26	13.2	44	15.9	37	15.4
8	23	13.0	18	9.1	33	11.9	30	12.5
9	11	6.2	16	8.1	26	9.4	20	8.3
10								
11								
12								
Total	177	100.0	197	100.0	277	100.0	240	100.0

Table A1c
Migrant Education Participants by Grade
1980-81 Through 1983-84

Year	80-81*		81-82		82-83		83-84	
Grade	N	%	N	%	N	%	N	%
1			14	7.7	19	8.9	5	2.2
2			13	7.1	17	8.0	18	7.9
3			15	8.2	17	8.0	26	11.5
4			22	12.1	20	9.4	24	10.6
5			21	11.5	28	13.1	25	11.0
6			15	8.2	23	10.8	28	12.3
7			18	9.9	21	9.9	23	10.1
8			14	7.7	17	8.0	19	8.4
9			18	9.9	16	7.5	13	5.7
10			13	7.1	15	7.0	23	10.1
11			10	5.5	11	5.2	15	6.6
12			9	4.9	9	4.2	8	3.5
Total			182	100.0	213	100.0	227	100.0

*No Records

Table A1d
ESL Education Participants by Grade
1980-81 Through 1983-84

Year	80-81		81-82		82-83		83-84	
Grade	N	%	N	%	N	%	N	%
K					1	.4	1	.4
1	150	25.6	109	31.3	71	28.4	77	29.8
2	124	21.2	57	16.4	30	12.0	50	19.4
3	107	18.3	52	14.9	43	17.2	28	10.9
4	57	9.7	34	9.8	29	11.6	20	7.8
5	47	8.0	34	9.8	23	9.2	20	7.8
6	28	4.8	32	9.2	11	4.4	17	6.6
7	29	4.9	11	3.2	19	7.6	14	5.4
8	17	2.9	10	2.9	10	4.0	18	7.0
9	17	2.9	5	1.4	11	4.4	9	3.5
10	8	1.4	2	.6	1	.4	3	1.2
11	2	.3	2	.6	1	.4	1	.4
12								
Total	586	100.0	348	100.0	250	100.0	258	100.0

Table A2a

Participant Characteristics of Grade and Gender
1980-81 Through 1983-84 for Chapter 1

Year	1980-81					1981-82					1982-83					1983-84				
	Male		Female			Male		Female			Male		Female			Male		Female		
Grade	N	%	N	%	Total	N	%	N	%	Total	N	%	N	%	Total	N	%	N	%	Total
K											1	33.3	2	66.7	3	1	25.0	3	75.0	4
1	217	58.8	152	41.2	369	342	55.4	275	44.6	617	361	59.4	247	40.6	608	389	56.0	306	44.0	695
2	140	57.1	105	42.9	245	161	55.3	130	44.7	291	188	57.1	141	42.9	329	208	61.4	131	38.6	339
3	125	55.1	102	44.9	227	145	52.5	131	47.5	276	143	57.4	106	42.6	249	148	53.6	128	46.4	276
4	127	48.7	134	51.3	261	125	49.2	129	50.8	254	145	50.3	143	49.7	288	143	54.0	122	46.0	265
5	157	54.9	129	45.1	286	133	50.2	132	49.8	265	139	48.3	149	51.7	288	165	52.1	152	47.9	317
6	145	52.2	133	47.8	278	154	55.4	124	44.6	278	168	54.0	143	46.0	311	138	52.1	127	47.9	265
7	168	60.4	110	39.6	278	96	60.8	62	39.2	158	95	61.3	60	38.7	155	116	59.2	80	40.8	196
8	99	63.5	57	36.5	156	72	66.1	37	33.9	109	63	60.6	41	39.4	104	60	54.5	50	45.4	110
9	55	61.8	34	38.2	89	17	50.0	17	50.0	34	19	67.9	9	32.1	28	10	50.0	10	50.0	20
10	-	-	-	-	-	1	100.0	-	-	1	-	-	2	100.0	2	-	-	-	-	-
11	-	-	-	-	-	-	-	1	100.0	1	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,233	56.3	956	43.7	2,189	1,246	54.6	1,018	45.4	2,284	1,322	55.9	1,043	44.1	2,365	1,178	55.4	1,109	44.6	2,487

Table A2b

Participant Characteristics of Grade and Gender
1980-81 Through 1983-84 for Indian Education

Year	1980-81					1981-82					1982-83					1983-84				
	Male		Female			Male		Female			Male		Female			Male		Female		
Grade	N	%	N	%	Total	N	%	%		Total	N	%	N	%	Total	N	%	N	%	Total
1	9	81.8	2	18.2	11	8	47.1	9	52.9	17	19	55.9	15	44.1	34	13	44.8	16	55.2	29
2	9	60.0	6	40.0	15	13	46.4	15	53.6	28	8	38.1	13	61.9	21	15	53.6	13	46.4	28
3	10	55.6	8	44.4	18	9	50.0	9	50.0	18	14	53.8	12	46.2	26	14	60.9	9	39.1	23
4	14	51.9	13	48.1	27	11	50.0	11	50.0	22	10	43.5	13	56.5	23	12	52.2	11	47.8	23
5	18	78.3	5	21.7	23	14	50.0	14	50.0	28	19	54.3	16	45.7	35	15	62.5	9	37.5	24
6	7	50.0	7	50.0	14	19	79.2	5	20.8	24	15	42.9	20	57.1	35	10	38.5	16	61.5	26
7	17	48.6	18	51.4	35	11	42.3	15	57.7	26	25	56.8	19	43.2	44	18	48.6	19	51.4	37
8	12	52.2	11	47.8	23	6	33.3	12	66.7	18	13	39.4	20	60.6	33	20	66.7	10	33.3	30
9	4	36.4	7	63.6	11	7	43.7	9	56.3	16	8	30.8	18	69.2	26	6	30.0	14	70.0	20
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	100	56.5	77	43.5	177	98	49.7	99	50.3	197	131	47.3	146	52.7	277	123	51.3	117	48.8	240

Chapter 1 participation tended to be slightly more male dominated (56 percent on the average). The same pattern was found for the ESL program and to a lesser degree for the Migrant program and the Indian Education progam. In all programs, gender was more equally distributed in the early grades, while junior high grades were clearly more male dominated.

Table A2c

Participant Characteristics of Grade and Gender
1980-81 Through 1983-84 for Migrant Program

Year	1980-81					1981-82				1982-83				1983-84			
	Male		Female			Male		Female		Male		Female		Male		Female	
Grade	N	%	N	%	Total	N	%	%	Total	N	%	N	%	Total	N	%	N	%	Total
1	No Records					9	64.3	5	35.7	14	14	73.7	5	26.3	19	1	20.0	4	80.0	5
2						7	53.8	6	46.2	13	10	58.8	7	41.2	17	14	77.8	4	22.2	18
3						7	46.7	8	53.3	15	7	41.2	10	58.8	17	16	61.5	10	38.5	26
4						9	40.9	13	59.1	22	8	40.0	12	60.0	20	14	58.3	10	41.7	24
5						8	38.1	13	61.9	21	13	46.4	15	53.6	28	12	48.0	13	52.0	25
6						8	53.3	7	46.7	15	10	43.5	13	56.5	23	14	50.0	14	50.0	28
7						8	44.4	10	55.6	18	11	52.4	10	47.6	21	11	47.8	12	52.2	23
8						9	64.3	5	35.7	14	8	47.1	9	52.9	17	9	47.4	10	52.6	19
9						12	66.7	6	33.3	18	9	56.3	7	43.8	16	4	30.8	9	69.2	13
10						6	46.2	7	53.8	13	10	66.7	5	33.3	15	15	65.2	8	34.8	23
11						4	40.0	6	60.0	10	4	36.4	7	63.6	11	10	66.7	5	33.3	15
12						2	22.2	7	77.8	9	6	66.7	3	33.3	9	3	87.5	5	62.5	8
Total						89	48.9	93	51.1	182	110	51.6	103	48.4	213	123	54.2	104	46.8	227

Table A2d

Participant Characteristics of Grade and Gender
1980-81 Through 1983-84 for ESL

Year	1980-81					1981-82					1982-83					1983-84				
	Male		Female			Male		Female			Male		Female			Male		Female		
Grade	N	%	N	%	Total	N	%	N	%	Total	N	%	N	%	Total	N	%	N	%	Total
K	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	1	1	100.0	-	-	1
1	74	49.3	76	50.7	150	66	60.6	43	39.4	109	43	60.6	28	39.4	71	46	59.7	31	40.3	77
2	65	52.4	59	47.6	124	29	50.9	28	49.1	57	20	66.7	10	33.3	30	28	56.0	22	44.0	50
3	51	47.7	56	52.3	107	24	46.2	28	53.8	52	28	65.1	15	34.9	43	23	82.1	5	17.9	28
4	27	47.4	30	52.6	57	17	50.0	17	50.0	34	12	41.4	17	58.6	29	13	65.0	7	35.0	20
5	24	51.1	23	48.9	47	18	52.9	16	47.1	34	12	52.2	11	47.8	23	5	25.0	15	75.0	20
6	20	71.4	8	28.6	28	16	50.0	16	50.0	32	6	54.5	5	45.5	11	6	35.3	11	64.7	17
7	13	44.8	16	55.2	29	8	72.7	3	27.3	11	14	73.7	5	26.3	29	9	64.3	5	35.7	14
8	10	58.8	7	41.2	17	5	50.0	5	50.0	10	4	40.0	6	60.0	10	13	72.2	5	27.8	18
9	10	58.8	7	41.2	17	3	60.0	2	40.0	5	6	54.5	5	45.5	11	4	44.4	5	55.6	13
10	5	62.5	3	37.5	8	2	100.0	-	-	2	1	100.0	-	-	1	1	33.3	2	66.7	3
11	-	-	2	100.0	2	2	100.0	-	-	2	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	1	1	100.0	-	-	1
Total	299	51.0	287	49.0	586	190	54.6	158	45.4	348	147	58.8	103	41.2	250	150	58.1	108	41.9	258

PARTICIPANTS' CHARACTERISTICS: ETHNIC DISTRIBUTION BY PROGRAM 1980-81 THROUGH 1983-84

Participants' Characteristics - Ethnic Representation 1980-81 to 1983-84

In terms of ethnic representation, the characteristics of Chapter 1 participants showed a higher share of Hispanic and black minorities than did the Mesa Public Schools district population (see Table A3).

Table A3a
Ethnic Distribution by Program and Year in Percent and Absolute Count

Year / Program		1980-81 (N = 3,618) White	Black	Hispanic	Am. Indian	Asian	1981-82 (N = 3,918) White	Black	Hispanic	Am. Indian	Asian
Chapter 1	%	79.2	2.5	14.8	3.0	.4	77.9	2.9	16.4	2.5	.4
	N	2,061	65	385	78	11	2,296	84	483	73	11
Indian Education	%	1.0	-	-	99.0	-	1.7	-	.8	97.5	-
	N	2	-	-	190	-	4	-	2	230	-
Migrant Education	%	-	-	-	-	-	8.2	2.2	85.3	2.2	1.7
	N	-	-	-	-	-	19	5	198	5	4
English as a Second Language	%	9.2	.1	74.8	7.6	8.2	4.4	-	69.4	11.1	15.1
	N	76	1	618	63	68	22	-	350	56	76
Total	%	59.1	1.8	27.7	9.1	2.2	59.7	2.3	26.4	9.3	2.3
	N	2,139	66	1,003	331	79	2,341	89	1,003	364	91

Year / Program		1982-83 (N = 4,038) White	Black	Hispanic	Am. Indian	Asian	1983-84 (N = 4,193) White	Black	Hispanic	Am. Indian	Asian
Chapter 1	%	76.4	2.8	18.7	1.8	.3	76.8	3.6	17.1	2.1	.5
	N	2,239	83	547	52	10	2,378	111	528	65	14
Indian Education	%	.8	-	.6	98.6	-	2.3	-	-	97.7	-
	N	3	-	2	348	-	7	-	-	297	-
Migrant Education	%	9.1	1.6	83.1	4.9	.8	5.9	1.1	86.6	4.8	1.1
	N	22	4	202	12	2	16	3	233	13	3
English as a Second Language	%	4.7	-	70.7	8.6	16.0	4.6	.2	76.2	6.1	12.7
	N	24	-	362	44	82	24	1	401	32	67
Total	%	56.6	2.2	27.6	11.3	2.3	57.8	2.7	27.7	9.7	2.0
	N	2,288	87	1,113	456	94	2,425	115	1,162	407	84

Seventy-seven percent on the average were white (district - 84 percent) as compared to an average 17 percent of Hispanic students (district - 10 percent). An average 3 percent of Chapter 1 students were black (district - 2 percent), 2.3 percent were American Natives (district - 2 percent), and less than one-half of a percent were Asian (district - 1 percent).

The ethnic composition of the ESL program, the Migrant program, and the Indian Education was consistent with the district and program philosophy of delivering services tailored to the needs of a predominantly Hispanic population (Migrant and ESL programs) or the needs of the Native American population (Indian Education). Across the programs and over time, little change was observed in the ethnic breakdown of program participants.

PART V

The Scope of the Integrated Data Base

To address the research questions, the different sets of program information on data tapes have been merged into one data base and supplemented by the demographic information provided by the program directors. The COBOL program needed to accomplish this merging of information was designed by Dale Lierman, Larry Landwehr and Sandra Thomas in the Data Processing Department.

The merged data base contains the following data elements as summarized in Figure 1. An individual case has a record length of 727 characters, consisting of one set of demographic information from a masters tape and 135 characters per year.

Parameters for Analysis

Data are classified by specific student, program and district parameters which are listed below.

Student Characteristics

Age

Sex

Ethnic group (White, Black, Hispanic, American Indian/Alaskan Native, Asian)

Home language (primary, 45 codes among them 10 tribal languages in American Indian group)

Father presence (mother only, father only, both parents, none) Mother presence

Retention code (promoted, retained in year n-1)

Grade point average (from total credit hours/units attempted)

Grade of test

Program Characteristics

Chapter 1 program codes (12, with summer school 17)

Indian Education program codes (3)

Migrant Education program codes (1)

English as a Second Language Code (1)

Entry/Exist Data (length of participation) in all programs (2)

Program withdrawal date/reason (code (20 codes)

School withdrawal code (9 codes)

Times taught (for Chapter 1 only)

District Characteristics

School type (elementary, junior high, senior high)

School (I.D.#)

Grade (pre-k to 9, 10-12)

Program type (Chapter 1, Indian Education, Migrant, ESL)

Fall cycle, spring cycle of testing

Program history/budget history

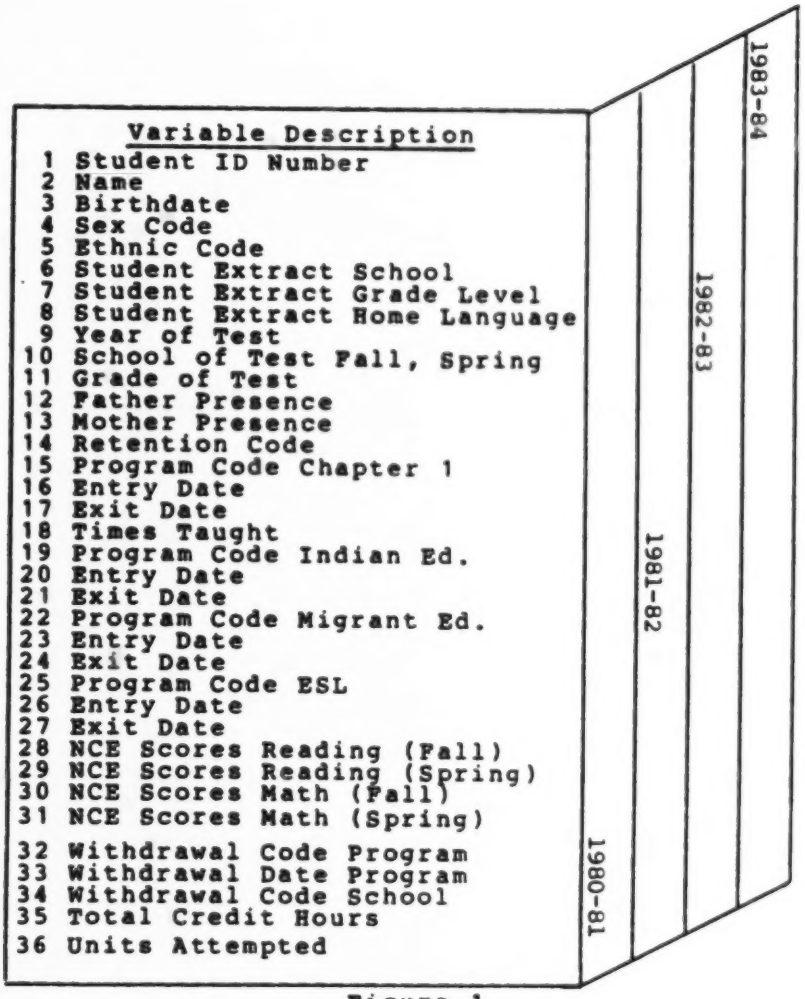
Variable Description
1 Student ID Number
2 Name
3 Birthdate
4 Sex Code
5 Ethnic Code
6 Student Extract School
7 Student Extract Grade Level
8 Student Extract Home Language
9 Year of Test
10 School of Test Fall, Spring
11 Grade of Test
12 Father Presence
13 Mother Presence
14 Retention Code
15 Program Code Chapter 1
16 Entry Date
17 Exit Date
18 Times Taught
19 Program Code Indian Ed.
20 Entry Date
21 Exit Date
22 Program Code Migrant Ed.
23 Entry Date
24 Exit Date
25 Program Code ESL
26 Entry Date
27 Exit Date
28 NCE Scores Reading (Fall)
29 NCE Scores Reading (Spring)
30 NCE Scores Math (Fall)
31 NCE Scores Math (Spring)
32 Withdrawal Code Program
33 Withdrawal Date Program
34 Withdrawal Code School
35 Total Credit Hours
36 Units Attempted
1980-81
1981-82
1982-83
1983-84

Figure 1